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ABSTRACT

Issues in public school finance are discussed in this research monograph, with an emphasis on Texas. Chapter 1 provides a national historical overview, examining the changing definition of equality. The second chapter examines equity challenges in the courts, specifically, two major types of constitutional issues: (1) equal protection clauses of state constitutions and the issue of education as a fundamental right; and (2) violation of the education articles of state constitutions. Issues in measuring equity are addressed in the third chapter, which analyzes six basic finance plans, vertical and horizontal measures, and methods of data analysis. The final chapter discusses the equity situation in Texas, which is complicated by new legislation mandates and economic decline. A conclusion is that school finance reform efforts often fail due to lack of clearly defined goals and consensus. The recommendation is made for Texas to develop goals before policy formation. Five tables are included and 51 court cases are cited. (65 references) (LMI)

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AN ISSUE OF EQUITY: THE FINANCING OF PUBLIC SCHOOL IN THE UNITED STATES WITH AN EMPHASIS ON TEXAS

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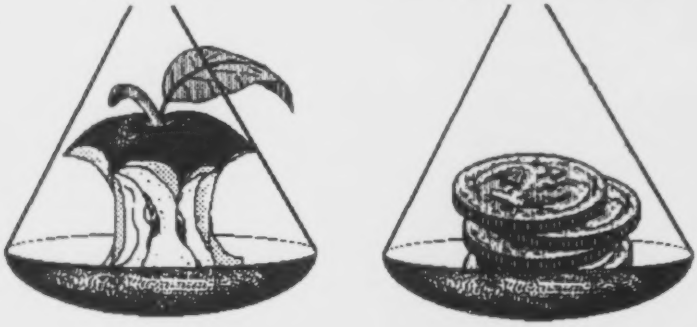

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Chapter One
THE ISSUE OF EQUITY

A crisis exists in public school finance across the nation. Litigation in state courts continues to challenge the constitutionality of state school finance plans based on issues of equity. At the same time, taxpayers are voting down bond proposals and tax proposals needed to produce school revenues. The need exists to define equity in measurable terms and then to determine methods for funding today's public schools in order to achieve that equity. The problem addressed by this research was that of defining and establishing equity in the financing of public schools in the United States.

Equity in Education: An Historical Perspective

The issue of equity in education has its roots deep in American culture and heritage. Americans view the values of equality, efficiency and liberty as conditions that government should seek to maximize. However, efforts to rearrange society so as to achieve any one of these goals would be futile. A complicated series of political and economic compromises is required to maintain an equilibrium among these values.

Garms, Gutherie, and Pierce (1978) view liberty as the highest held of the three values in American society. They contend that efficiency for its own sake has little meaning, and that few persons desire absolute equality with their peers. Equality of wealth and circumstances, however, can be viewed as a desirable means to the end of greater choice, and thus, maintenance of liberty.

Throughout U. S. history, education has continued to be one of the primary avenues through which society advocates the values of equality, efficiency, and liberty. However, in education efficiency tends to be impeded by equality efforts such as desegregation and conflicting expectations for

school products, and by weak incentives for educators to produce better products (Garms, Gutherie, and Pierce 1978). The pursuit of liberty or freedom of choice has resulted in the dispersion of governmental authority to many different agencies, boards, and other governing bodies. Historically, the power to make educational decisions has evolved in the same way. Centralized authority represented more rigid control and uniformity and, therefore, limited freedom of choice. The evolution of literally tens of thousands of small local school districts diffused this accumulation of power. The results, however, have been both inefficiency and inequality. It is the difficult task of educational policymakers to be cognizant of the conflicts among these three values and to understand the compromises necessary to maximize any one of these values in the field of education.

The role of education in American society has changed through the centuries. Thus differing emphases on the values of equality, efficiency, and liberty can be seen in the history of American education. The goal of American forefathers was that every citizen participate in government as equals. Education was a means to this end. In the nineteenth century education began to assume economic significance in response to the increasing demands of an industrial technology. Schooling, which produced an educated work force, was considered an important contributor to economic efficiency. By the twentieth century, improved technologies made formal education a necessity for individual economic and social success. Education assumed new importance in its role in maximizing equality among American citizens (Garms, Gutherie, and Pierce 1978).

Equality in education was recognized by American forefathers as a necessity to the success of a representative government. As early as 1791 Robert Coram wrote that equal representation could not be achieved without an equal mode of education for all citizens (Hansen 1926). Early statesmen

such as Washington, Paine and Jefferson wrote and spoke of education's importance in preserving liberty in the new nation (Knight 1934). The first state legislatures recognized the need for widespread education, authoring constitutions that included provisions for the establishment of schools, but failing to provide the necessary financial support (Cyr, Burke, and Mort 1938).

Thomas Jefferson is credited with the first attempt to insure equality of educational opportunity for American children. His "Bill for the More General Diffusion of Knowledge in the State of Virginia" promoted the concept that education could help to strengthen the foundations of republican government. Jefferson believed in a "natural aristocracy" in which talented children were ensured the privilege of education regardless of their economic or social backgrounds. A complete opposite of the commonly held practice of inherited privileges, this plan would allow children of any background to rise to top positions of responsibility and power. Unfortunately, it was an idea before its time, but its defeat in 1817 did not mean its death (Gordon 1961).

As the movement for free public schools grew, the overriding question became one of cost. At first schools were made only partly free with costs met by state aid, by local taxation, and by tuition fees called rate bills. By 1825 the need for taxing all property of the state to support schools became generally recognized and by the middle of the century, rate bills were abolished. Taxation for schools was in the form of a tax on general property and the tax burden was equalized as much as possible (Cyr, Burke, and Mort 1938).

The first half of the nineteenth century was characterized by bitter struggles between the friends of public education, the conservatives, and the greedy. Conservatives seeking to maintain elitist policies met resistance from those with a growing commitment to an egalitarian society. Ashline, Pezzullo and Norris (1976) indicate that Horace Mann became the spokesman for those who believed in equality as a value basic to American philosophy. Mann both

admired and feared America's diversity and so worked toward goals that would ensure a unity of purpose while still allowing for individualism. He believed that education was a necessity for all American children, regardless of background, and proposed a "common school" for all. Contrary to the connotation of a school for the poor, Mann's "common school" would serve as the most powerful tool available for erasing social and economic inequities. The common school would teach all children the basics of republican government and thus ensure enough unity of purpose to safeguard the new nation's foundation. Mann (1849) believed that education is the great equalizer of the conditions of men and called it the balance-wheel of the social machinery.

In the United States, in the absence of a strong traditional class structure like that in England, universal education in publicly-supported free schools soon became widespread. As chronicled by Coleman (1968), the public schools quickly became the common school proposed by Mann, attended by representatives of all classes. Thus a common educational experience was provided for most American children, excluding only those upper-class children in private schools, those poor who went to no schools, and Indians and Southern Negroes who were without schools.

By the late 1800s and early 1900s, the nation did open the doors of schools to all its citizens. Free, public education allowed many children to succeed and advance themselves. But the emphasis on teaching the basics of republican government advocated by Mann seems to have been translated into the doctrine of "sameness." It may be that American values were taught as the only values worth having so that sameness rather than equality was achieved (Bloom 1987). This focus on "Americanism" caused problems for any who differed greatly from the American norm. Immigrant children, for example, did have access to free, public education; but they may have been unable to take full advantage of its benefits. Forced to Americanize their

names or be subjected to racial slurs, and pressed to reject their native cultures and languages, these children probably grew to believe that equality translated as sameness (Ashline, Pezzullo, and Norris 1976).

There was no real national policy to help immigrants, who tended to be the nation's poor. But immigrant children fared far better than did the children of black Americans. Poor whites, especially in the South, viewed equality for blacks as a threat to their chances of success and therefore supported discrimination against black children openly and with hostility (Ashline, Pezzullo, and Norris 1976). The absence of educational opportunity for these groups of poor and minority children probably arose from the caste and feudal structure of the largely rural society in the South. As was the case in the education system in England, equality of educational opportunity was hardly considered in a system designed to differentiate educational opportunity appropriate to one's station in life (Coleman 1968).

A Supreme Court decision in *Plessy v. Ferguson* (1896) found the separation of races in railroad coaches in the state of Louisiana to be constitutional. This "separate but equal" theory was generally accepted and was used, particularly by people in the southern states, to justify separate schools for black children. This case prolonged inequities in a system presumed to be founded on the principle that all men are created equal. The issue of educating black children was ignored by American education policymakers until almost a century later.

Financing Public Education

The latter half of the 19th century saw a transition from an agrarian-based economy to one that was based on mass production and mechanization. The need for people with more specialized skills forced changes in the education systems. Broader education that provided a common curricu-

lum for all children and longer school careers became the norm and were responsible for the growth in the number of schools and for the increase in education costs. By the beginning of the twentieth century free, public education had become the birthright of every American child. For the most part, schools were maintained by general property taxes that were assessed on all property regardless of whether its owner had children. Some states established permanent endowment funds from which flat grants were distributed to support public schools, but the bulk of school revenues was generated locally. As people migrated to the cities to take jobs in the growing industries, small rural schools lost their local support while large city schools, because of the aggregation of people and wealth, could afford to operate schools longer and serve more children (Cubberly 1972).

Inherent in this growing system of public schooling is a concept of educational opportunity which focuses on equality. According to Coleman (1968) this concept includes the following elements:

1. Providing a *free* education up to a given level which constituted the principal entry point to the labor force.
2. Providing a *common curriculum* for all children, regardless of background.
3. Partly by design and partly because of low population density, providing that children from diverse backgrounds attend the *same school.*
4. Providing equality within a given *locality*, since local taxes provided the source of support for schools.

Underlying this concept of equality of educational opportunity are several assumptions. First, it is assumed that the existence of free schools eliminates economic sources of inequality of opportunity. On the contrary, however, as free schools began to flourish, continued school attendance

prevented a boy from being trained in his father's trade. Therefore, taking advantage of "equal educational opportunity" caused a child to lose the opportunity to enter the occupation he was most likely to fill (Coleman 1968). Differentiated secondary curricula and tracking, commonly used today, have the same effect by closing off the opportunities afforded by the track (vocational or college-preparatory) not chosen. The idea of a common educational experience implies a widened range of opportunity, never the contrary.

Another assumption implied by the concept of equality of educational opportunity described by Coleman is that opportunity lies in *exposure* to a given curriculum. The amount of opportunity would be measured in terms of the level of the curriculum to which the child is exposed. According to Coleman (1968) the fallacy in this assumption lies in the relatively passive role of the school in relation to the child's role. Traditionally, the school's obligation is to provide an opportunity that includes the four elements Coleman outlined, while the obligation to use the opportunity is on the child and his family.

While these assumptions may not be valid, this concept of equality of educational opportunity has been implicit in most educational practice during the nineteenth and twentieth centuries. There have been serious challenges to some of the assumptions, but traditions tend to die slow deaths.

The first concern relative to equality of educational opportunity grew out of the first element—providing a ducation. Thus the concept of equity in schools moved into the realm of public school finance. One of the first to become concerned enough to write persuasively about equity as an issue in the financing of public schools was Ellwood P. Cubberly. In 1906 he wrote that one of the most important administrative problems is how to finance the schools properly and pointed out that the solution to the problem lies in the apportionment of available funds (Cubberly 1972).

According to Cubberly the typical efforts to generate more school

revenue involved raising school taxes with little consideration of the apportionment of the funds generated. His concern was that the best possible use be made of school revenues.

If all children of a state are equally important, then at least theoretically, Cubberly believes they are entitled to have the same advantages. To accomplish this, he suggests that states set as high a minimum of good instruction as possible, without reducing all to minimum, and then equalize the advantages to all as nearly as can be done with the resources at hand. If a state deems it desirable to provide certain advantages for its children, then Cubberly believes it should require communities to furnish those advantages, rendering assistance to poorer communities in need. By setting high standards, the state would place itself under obligations which are for the general good. Cubberly insists that this is not only justice, but is demanded by sound public policy (Cubberly 1972).

Cubberly defines equity as the fair distribution of the advantages of schooling to all children within a state regardless of where they live. This is consistent with the fourth element of Coleman's (1968) concept of equality—providing equality within a given locality—since local taxes provide the source of support for schools. Cubberly does not contend, however, that all schools and therefore all children should have the exact same number of dollars, but rather that children be afforded the same high minimums of good instruction. He firmly believes that raising taxes to generate school revenue could often be avoided if careful reapportionment of existing funds were achieved. Reapportionment alone, Cubberly contends, could decrease the burdens of support while raising minimum standards at the same time (Cubberly 1972).

In 1923 George Strayer and Robert Haig provided what has been called the "greatest impetus to the concept of fiscal equalization and educational opportunity," (Indiana School Finance Study 1979, 20). They asserted

that state programs of school support should furnish each child with a minimum of educational opportunities and that the tax burden for the support of these schools should be borne by individuals in relation to their ability to pay (Strayer and Haig 1923). Paul Mort, a student of Strayer's, advanced these ideas to include objective measures of educational needs as a primary component of satisfactory equalization programs (Mort 1924, Mort 1926).

Enough concern about school finance had been raised in the first two decades of the twentieth century that educators began to focus on the topic as an important aspect of school administration. Writing about school finance during this time tended to be evaluative rather than prescriptive.

During the next two decades the purposes of most works seemed to be to help educators and economists understand the history of school finance to date and to stimulate interest in the problem of equity in the financing of public schools. Others wrote volumes to promote understanding of school finance, but these were limited in scope to local issues of school business administration (Reeder 1929, Morrison 1930, Morrison 1932).

By the 1930s school finance volumes began to be somewhat more prescriptive in nature. As some local districts failed to produce sufficient revenue for schools, state governments played a greater role in supporting the public schools. During this time period, federal support for education was also advocated by several authors (Mueller 1934, Norton and Norton 1937, Johnson 1941).

Mort and Reusser coauthored a volume in 1941 with the emphasis on understanding the origins of public education as a key to developing solutions for its current financial woes. They outline three distinct periods in the development of public education. During the early period as the nation was forming, education was meager, served relatively few students, and was supported largely by fees paid by parents of students. Education was neither

universal, nor free, and was held in high esteem only by those with a vision for its future role in the educating of the nation.

The second period of development, covering the bulk of the nineteenth century, was characterized by a marked change in the means of support for schools and in the attitude toward school support. This period witnessed the founding of state-wide school systems with taxation of property as the predominant source of revenue for schools. State and national endowments were increased during this period, and unified school systems were characterized by graded elementary schools and secondary schools.

The third period, which Mort and Reusser (1941) call the Present Period, encompassed the years from about 1900 to 1936. The authors call this the period of equalization of educational opportunity. School programs were expanded, enormous increases occurred in the number of students served by the schools, and school costs rose rapidly. The result was the development of new forms of raising revenue and of distributing the proceeds.

In general, the time period beginning with Cubberly's writing in 1906 until the middle of the 20th century was characterized by the tremendous growth of the public school system and the resulting demands for increased financial support. The focus on financing tended to be in terms of how to generate sufficient funds to meet increased demands. The issue of equity was raised by those who were concerned with the inability of all schools to provide similar services. The focus continued to be on financial equity within given localities with little attention given to the specific educational resources made available with the "equalized dollars." The responsibility for equalizing educational opportunity still lay in the hands of state legislatures, and concern for equalization was ignored altogether by some less progressive states.

Equality of Educational Opportunity

Until the middle of the twentieth century, the "separate but equal" theory that had been upheld in the 1896 *Plessy v. Ferguson* was maintained in public education, especially throughout the southern states. It was not until the 1954 *Brown v. Board of Education* decision that this theory was unanimously rejected. The judges concluded "that in the field of public education the doctrine of *separate but equal* has no place. Separate educational facilities are inherently unequal," (Brown 1954, 692).

This decision marked the beginning of a nationwide focus on the issue of equity or equality in American life and American education. It had become evident that even when identical facilities and identical teacher salaries existed for racially separate schools, something was still inherently unequal. This inequality had remained an unarticulated feeling until the 1954 *Brown* case. The essence of it was that the *effects* of such separate schools were likely to be different. The Court's decision was a combination of two unrelated premises: the evolution of a new concept of educational opportunity that looked at the results of schooling, and the legal premise that the use of race as a basis for school assignments violates fundamental freedoms.

The importance for the concept of equality of educational opportunity is that a new and different assumption was introduced, the assumption that equality of educational opportunity somehow depends upon effects of schooling. Because the Court did not use effects of schooling as a criterion of inequality but only as a justification for a criterion of racial integration, integration emerged as the basis for another new concept of equality of educational opportunity. The idea of effects of schooling as an element in defining equality of educational opportunity was introduced, but immediately overshadowed by the criterion of racial integration.

A new issue of equity had been raised, but would have little tangible effect

on the educational opportunities of minority students during the next decade. The Supreme Court decided no cases on specific implementation plans until 1963 (Goss v. Board 1963). As the legal battles to implement the *Brown* decision continued across the U. S., new attention was focused on the condition of poor whites as well as minorities.

In effect by the mid-sixties was a multi-faceted definition of equality or equity in education. For most people, equity in education meant a free education, a common curriculum for all children regardless of background, and equal expenditures within a given locale. However, the racial issue raised in the 1954 case added a new dimension to the equity issue that could not be ignored, the idea that the effects of schooling somehow need to be equalized before real equity is achieved. Disagreement over the definition of equity in education would continue over the next several decades.

Taking the lead from President John F. Kennedy, in 1964 Lyndon B. Johnson successfully campaigned in support of education measures. Because of his own background as an educator and a personal desire to be known as the "education" President, Johnson soon focused sufficient public attention and concern about the low academic achievement of poor and minority students to spur legislative activity directed at improving educational opportunities (Cronin 1968). The most significant federal programs to affect equity in education during this time period were the 1964 Civil Rights Act and the Elementary and Secondary Education Act of 1965 (ESEA).

Title VI of the Civil Rights Act forbids discrimination on the basis of race or color in programs receiving federal funds. The Elementary and Secondary Education Act provides massive federal aid for specific programs at the state and local levels. Both kinds of programs necessitated a change in the philosophy and operation of the United States Office of Education, whose responsibility it is to implement and oversee both programs. Prior to this time,

the Office of Education, with its handful of programs and small number of employees, attempted merely to assist educators to do their work. Then the mission of Johnson and his War on Poverty, to improve the cause of education in the United States, called for action leading to qualitative changes in American education (Land 1968).

Conflicts arose, both internally and externally, as federal involvement in education grew to previously unmatched proportions. The Office of Education struggled with the desire to get on with the job of education, distributing ESEA funds and overseeing fund usage. But simultaneous implementation of Title VI of the Civil Rights Act caused conflicts with the Office of Equal Education Opportunities, which insisted that desegregation was a prior condition of educational program implementation. It seemed possible that huge blocks of funds would not be distributed until Title VI assurances could be processed and negotiated. The magnitude of the task of processing desegregation plans and contacting districts that had filed no plans or unsatisfactory plans was overwhelming (Land 1968).

State and local education agencies quickly became frustrated with the federal government's insistence on compliance as a prerequisite for the distribution of federal funds. According to Campbell and Layton (1968) the federal thrust in education policymaking frustrated state policymakers enough to cause a form of counterthrust in the form of the Education Commission of the States created by the Compact for Education.

The Commission was conceived by James B. Conant in his book *Shaping Educational Policy* (1964). He viewed the jumble of private and public bodies influencing education during the 1960s as chaotic and recommended what he believed to be a path to the development of a nationwide education policy. His suggestion was that the fifty states, or at least fifteen or twenty of the more populous states, enter into a compact for the creation of an Interstate

Commission for Planning a Nationwide Educational Policy.

With grants from both the Carnegie and Danforth Foundations, and leadership from former Governor Terry Sanford of North Carolina, Conant's idea was transformed into a reality (Pierce 1968). In 1966 the Education Commission of the States was formed as an entity made up of political and educational leaders dedicated to strengthening education in the states. Campbell and Layton (1968) describe the Commission as a counterthrust in educational policymaking, designed to protect state interests in education when pitted against the ever-growing federal involvement in educational funding and policymaking. However, the real purpose of the Commission was to bring together politicians and educators to strengthen education.

During its earliest months, the Commission focused its efforts on research. However, pressures growing out of states' frustrations with federal education policies soon turned the Commission away from its emphasis on sponsorship of studies toward becoming a public forum on federal-state relations in education. By 1967 the Commission had shifted its focus away from research toward seeking to find out how it ought to respond to the national government.

Of importance to this study is the issue of how this interaction between federal and state forces working to improve education related to a national definition of equality of educational opportunity. An evolution had occurred in the definition that was shifting the emphasis away from equal inputs in terms of facilities, curriculum, and expenditures, and toward an emphasis on equalizing educational outputs. Although this had not been articulated in these exact terms, Johnson's War on Poverty programs worked on the assumption that more money (inputs) allocated to poor and disadvantaged students would improve their academic achievement (outputs). Consistent with the earlier notion of equality of educational opportunity, however, was the

idea that integration, which guaranteed students the same facilities, curriculum, and levels of expenditures within a given locale, was the answer to providing equality of educational opportunity.

Changing Definition of Equity

Two reports in the 1960s added significant, but controversial data to the search for a uniform definition of equality of educational opportunity. The Civil Rights Act of 1964 directed the Commissioner of Education to survey inequality of educational opportunity among all groups in the United States. The survey was begun promptly, and in 1966 a 743-page report of the findings, prepared by James S. Coleman and six associates was published (Coleman and others 1966). So devastating was the report, subsequently known as the *Coleman Report*, that the doctoral Colloquium Board of the Harvard Graduate School of Education focused its 1968 fall conference on it.

According to James K. Kent (1968) the *Coleman Report* stands as a seminal document in the history of American education. Prior to its publication, the traditional definition of equality of educational opportunity was measured by school factors such as the teacher-pupil ratio, per-pupil expenditure, laboratory facilities, number of volumes per student in the school library, and other measures of resources or inputs available for the education institution in question. The *Coleman Report* exploded many of these notions, finding instead that these physical and economic school factors have little effect on student learning (Coleman and others 1966).

Though extremely controversial, a new definition of equality of educational opportunity or equity in education emerged with the *Coleman Report*. The new concept focused on the effects or results of school learning rather than on arbitrary measures of resource inputs. Coleman (1968) elaborated in his speech at Harvard, citing a dramatic shift in the burden and function of

public education during the decade just past. The formerly passive role of the school to provide free public resources left the responsibility of taking advantage of these resources to the child and his family. The findings of the *Coleman Report* demanded a reversal of this responsibility. Coleman (1968) declared, the responsibility to create achievement lies with the educational institution, not the child. Thus equality of educational opportunity is not so much determined by the equality of resource inputs, but by the power of these resources in bringing about achievement (Coleman 1968).

Participants in the 1968 Harvard Colloquium Board Conference agreed with Coleman that a new definition of equality of educational opportunity related to school learning outcomes had emerged, but their views were divergent as to how this goal of equal schooling outcomes could be achieved. The *Coleman Report* stressed the student's home environment, the social composition of the student body, and the quality of teachers as the factors most highly correlated with student achievement (Coleman 1966).

Some conference speakers used this data to argue that racial integration in education is an absolute necessity in raising the achievement of lower class students. Others maintained that the *Coleman Report* had no relevance whatsoever for them. Negro leaders condemned the report claiming white supremacy as the basis for the data. Believing that integrated education was a physical impossibility in large urban areas and a political impossibility due to anti-black feelings among whites, Negro leaders denounced the paper as a report intended to show black inferiority. They refused to subscribe to the view that "a black kid must sit next to a white kid to learn" (Kent 1968, 244). Coleman was sympathetic with the integration argument, but rejected the notion that only through racial integration could the achievement of Negro children compare favorably with that of white children (Coleman 1968).

Focusing on integration as the answer to the elimination of differences in

academic achievement among racial groups implies that there are no other influences, such as the family environment, which affect achievement. Coleman's report indicated that family background and home environment do in fact have an effect on student achievement (Coleman 1966). He explained:

> **The focus becomes the relative intensity of two sets of influences on student achievement: those which are alike for the two groups, principally school, and those which are different, principally home or neighborhood. If the school's influences are not only alike for the two groups, but very strong relative to the divergent influences, then the two groups will move together. If school influences are very weak, then the two groups will move apart. Or more generally, the relative intensity of the convergent school influences and the divergent out-of-school influences determine the effectiveness of the educational system in providing equality of educational opportunity (Coleman 1968, 21).**

Thus complete equality of educational opportunity cannot be achieved by controlling a single factor like racial integration, but requires the elimination of all out-of-school differences among children as well.

Controversy surrounded the *Coleman Report* as is the case with much social science research. Regardless of one's perspective on the Coleman data, it cannot be denied that the report's findings "challenge the very structure and moral fabric underpinning public education," (Kent 1968, 245).

Another extremely controversial report was published in 1969 by Arthur Jensen. His article, "How Much Can We Boost I.Q. and Scholastic Achievement," minimized the effect of environment on intelligence and achievement and, instead, argued that genetic factors are more strongly implicated in intelligence differences (Jensen 1969). Many of Jensen's peers considered

his scholarship of high caliber and agreed with the genetic influence in intelligence (Kagan 1969, Cronbach 1969, Hunt 1969, Bereiter 1969, Elkind 1969, Brazziel 1969). However, Jensen's conclusion that genetic factors are strongly implicated as the *primary* cause for the average Negro-white intelligence difference raises questions.

Failure to consider these other alternative hypotheses to explain differences in I.Q. is the major weakness of Jensen's work according to Anastasiow (1969). Despite his failure to consider all of the possible explanations for intelligence differences, Jensen describes what many would agree is required for early school success:

> **Our thinking almost always takes as granted such features as beginning formal instruction at the same age for all children (universally between ages five and six), instruction of children in groups, keeping the same groups together in lockstep fashion through the first several years of schooling, and an active-passive, showing-seeing, telling-listening relationship between teacher and pupils. Satisfactory learning occurs under these conditions only when children come to school with certain prerequisite abilities and skills: an attention span long enough to encompass the teacher's utterances and demonstrations, the ability to comprehend verbal utterances and to grasp relationships between things and their symbolic representations, the ability to inhibit large-muscle activity and engage in covert "mental" activity, to repeat instruction to oneself, to persist in a task until a self-determined standard is attained—in short, the ability to engage in what might be called self-instructional activities, without which group instruction alone remains ineffectual (Jensen 1969, 10).**

The implication is that children who do not possess these skills when they enter school will not be successful. The early childhood experiences that help to develop these skills are often absent in homes of children in lower socio-economic groups.

In terms of a definition of equality of educational opportunity, Jensen's prerequisites for school success seem to mesh with the definition that emerged with Coleman's report. Equality of educational opportunity for disadvantaged children cannot exist until certain prerequisites are met that will give these children an equal chance at being successful in school. Equality then must be measured in terms of the outcomes of the child's schooling experience. Jensen helps the education profession by calling attention to some of the skills necessary for school success. Anastasiow (1969) indicates that the issue is not one of heredity versus environment, but one of discovering what kind of environmental stimulations are necessary to reach the potential of what is inherited.

In the field of education, the value of equality has been translated to mean equality of educational opportunity. The argument is not that the education itself should be equal. Instead operational definitions have focused on equality issues such as equal access to education, equal treatment in education, and equality of outcomes in education.

The most widely applied definition of equality of educational opportunity initially implied that schools, of whatever quality, be made available to all students. This translates to mean equal access to schools for all students. But the focus on equality necessitated an evolution of this definition to include consideration of the quality of services available. In other words, every child should be provided with at least some minimally adequate school services. Typically this translated into state policies that included a guaranteed minimum expenditure level which local school districts were to transform into

minimally adequate programs. The results, however, have been wide variations in expenditures, triggering a series of lawsuits questioning the legality of the resulting inequities.

The definition of equality of educational opportunity includes the premise that learners have widely varying characteristics, abilities, and thus, needs. Therefore, equal educational treatment becomes an integral part of the operational definition of equality of educational opportunity. Minimally adequate school services are insufficient to provide equal treatment because what is adequate for some does not give others an equal chance to compete for life's rewards. Attempts to balance educational services based on students' needs theoretically results in equal treatment for all pupils, but clearly demands unequal resources.

Beginning in the early 1970s, a new definition of equality of educational opportunity began to emerge. Based on the observation that academic achievement had become crucial for personal success, authors such as Charles S. Benson (1965), Henry S. Dyer (1968), Daniel Moynihan (1972), and James W. Gutherie (1975) proposed that the measure of equality be equal student learning, at least in terms of minimal or basic skills. Initially it was believed that the objective of equal student learning would be met if all graduating seniors were able to perform at least at an eighth grade level in reading, math and composition. Proponents of this definition of equality believed schools should be held accountable for achieving these minimum outcomes regardless of the resource level necessary to do it. Some expanded this concept to include the school's responsibility for "equal life chance" (Garms, Gutherie, and Pierce 1978).

By this definition, school services and resources should be used so as to assure every normal child, upon graduation from secondary school, an equal opportunity to compete with any other student. The degree to which

race, socioeconomic status, ethnic origin, and similar social measures were no longer predictive of adult income or occupation would be used to measure the school's success in achieving the goal of "equal life chance" for its students. Achievement of this goal continues to be sought, but the resource level necessary to accomplish this task is staggering.

The Present

In the 1980s, the concept of equity in education has been defined in terms of justice and fairness. Burrup and Brimley (1982) define equity in schools as the challenge of distributing and expending available revenues to schools and students with fairness and without partiality regardless of their location within a state. They distinguish between equity and equality, reminding school policymakers that spending the same dollars on each student is equality, but is not equitable because of the special needs of certain learners. Jones (1985, 5) defines equity broadly as "justice and fairness in the treatment of individuals" and recognizes it as "a generally accepted goal of education, education finance, and government activity." However, such a broad definition does not provide an easily measured basis for determining if said equity has been achieved.

Recognizing the importance of measurement in determining if equity is achieved, Berne and Stiefel (1984) wrote extensively on the subject as it relates to school finance. Rather than argue for the adoption of particular equity concepts, they "provide a framework to allow analysts and policymakers to easily identify the important dimensions of alternative concepts and to explore quantitatively those concepts that best represent their own values," (Berne and Stiefel 1984, 7). The Berne and Stiefel framework is organized around the answers to four questions about equity. (See Chapter Two for a description of this framework).

A single, uniform definition of equity in education does not exist at present. Few would argue that an outcomes-based definition is the ideal. If all students gained an equal chance at economic success as a result of their experiences in public education one could certainly say that equity had been achieved. However, even if educators, political leaders, and community members could agree on such a definition of equity in education, measurement would continue to pose a problem. Reliable measures of long-term outcomes of schooling such as occupational status, income, and personal satisfaction have yet to be developed.

The majority of analyses of equity in public schools focuses on school finance issues. The distribution of inputs such as dollars, price adjusted dollars, and physical resources is analyzed to determine if all students affected are benefiting from an equitable share. Proponents of an outcomes-based definition of equity would argue that equal dollars does not necessarily mean that equality of educational opportunity has been achieved. In many instances, students with special needs require a greater share of available resources in order to be able to be successful in school.

More important than a uniform definition of equity is an understanding of the complex set of issues involved in determining whether equity has been achieved. Legislators, educators, and community members must select among the many equity objects, principles, and measures to determine if a local education system is equitable.

Equity analyses triggered by litigation or the threat of it, are reactive rather than proactive. A more appropriate approach would seem to be for those involved in education policymaking to agree on equity goals and then plan and evaluate the public education system in light of those goals.

Chapter Two

EQUITY CHALLENGES IN THE COURTS

An investigation of the equity issues in school finance would not be complete without an understanding of the considerable litigation that has been filed toward the end of more equitable schooling for American children. According to Walker (1988a), it is necessary to draw a distinction between "first generation" and "second generation" equity issues. The former refers to the equitable availability of schooling, while the latter refers to the equitable distribution of resources for schooling (Walker 1988a).

Since an 1896 decision in *Plessy v. Ferguson* that enunciated the "separate but equal" doctrine in a case dealing with separation of the races in railroad coaches in Louisiana, American schools had operated under the implication that the doctrine was acceptable within their boundaries. It was not until 1954 that the question of the doctrine's acceptability for public schools was challenged. The United States Supreme Court unanimously declared in *Brown v. Board of Education of Topeka, Shawnee County, Kansas* (1954, 686) that "the segregation of children in public schools solely on the basis of race, even though the physical facilities and other tangible factors may be equal, deprives the children of the minority group of educational opportunities, in violation of the Equal Protection Clause of the Fourteenth Amendment."

The issue of equitable availability of schooling had been addressed head-on and decided, but implementation would be much longer in coming than the decision. The Supreme Court decided no cases on specific implementation plans until 1963 (Goss v. Board of Education). Because of a reluctance to implement the 1954 decision, especially in southern states, the decision had little tangible effect on the educational opportunities of many

minority students. However, President Lyndon Johnson's War on Poverty focused public attention on low-income whites as well as minorities, and soon sufficient concern about the low academic achievement of poor and minority students was raised to spur legislative activity directed at improving educational opportunities.

In the mid-1960s then, improvement in equality of educational opportunity occurred, not as a result of litigation, but primarily as a result of legislated compensatory education programs, developed at federal and state levels, and funded primarily by the federal government. According to Pincus (1974), the most significant of these programs were those created by the Economic Opportunity Act of 1964 and the Elementary and Secondary Education Act of 1965 (ESEA). During the same time period, Title VI of the 1964 Civil Rights Act forbade discrimination on the basis of race or color in programs receiving federal funds. Thus, federal financial aid to schools also became linked to the equitable availability of schooling.

Prior to the late 1960s, litigation that questioned equity in public schools had focused primarily on the availability of schooling. Since that time, however, a shift has occurred and the litigation during the past two decades has focused on the equitable distribution of resources for schools. In the mid and late 1960s, concern focused on the needs of the educationally disadvantaged and the realization that those students typically received fewer educational resources than other students (Pincus1974). These concerns were responsible for a wave of "second generation" equity litigation that has challenged public elementary and secondary school finance methods of distributing educational resources. Suits were filed on behalf of poor children, some based on denial of equal protection under federal and/or state consititutions; others argued that current state school finance systems were not satisfying the public education provisions of their state constitutions.

Early Litigation

Several of the first cases involving "second generation" equitable resources concerns and filed in federal courts have been chronicled by Leland Melvin (1984). One of the earliest suits filed in Illinois recognized a wide variance in expenditures per child across districts, but was dismissed on the basis that the plaintiffs provided no suitable basis of measure for determining educational needs (McInnis v. Shapiro 1968). The decision was upheld by the U. S. Supreme Court (McInnis v. Ogilvie 1969).

In *Burruss v. Wilkerson* (1969) plantiffs cited unequal opportunities and failure of the Virginia school finance system to take care of a variety of educational needs of students. The court rejected the first allegation and declared that the court would not become involved in determining educational needs of students. This decision was upheld by the U. S. Supreme Court (Burruss v. Wilkerson 1970).

A Minnesota case, *Van Dusartz v. Hatfield* (1971), held that education was a fundamental interest and that a system based on wealth of the school district created a suspect classification, but the court deferred a final decision pending correction by the state legislature. A plaintiff in New York (Spano v. Board of Education 1972) sought judgment declaring unconstitutional the state's existing legislative and constitutional provision for levying and distributing school taxes, but the court granted the defendant's motion to dismiss the complaint in that it did not state a cause of action.

In New Jersey (Robinson v. Cahill 1973a) a federal court found that the state's system of financing public education violated equal protection rights guaranteed by both state and federal constitutions. However, the court delayed its decision until the legislature could act to correct the problem.

Fiscal Neutrality: A New Judicial Strategy

During this period of early litigation, scholars began concentrating efforts on the analyses of inequities of school finance systems across the states. The work of two sets of scholars had far-reaching consequences on the outcomes of future school finance litigation. Arthur Wise (1967) focused on potential legal remedies for the tax rate and expenditure disparities that then characterized school financing arrangements. John E. Coons, and his law student protegés, William H. Clune and Stephen D. Sugarman, were conducting desegregation research for the Civil Rights Commission (Gutherie and others 1971). Through this research they were introduced to the complexities of property taxation and school aid distribution formulas.

Wise and Coons' team reached a common conclusion that the inequalities of school finance arrangements across the fifty states were much more likely to be addressed and reformed by seeking action through the judicial system than through the legislative process (Gutherie and others 1971). Using the U. S. Constitution's Fourteenth Amendment and education sections of state constitutions, Wise and the Coons, Clune, and Sugarman team argued that education was of sufficient significance to twentieth century Americans as to have acquired the status of a fundamental interest and that it therefore was deserving of not only state, but also federal constitutional protection (Gutherie and others 1971).

These scholars proposed that if education were deemed a fundamental interest, then a government would have to possess a compelling reason for discriminating against individuals. Such strict scrutiny of governmental purposes would also be triggered when suspect classifications such as race, income or geographic residence were involved as recipients of publicly supported services (Gutherie and others 1971).

If these legal principles were borne out in relation to education and education finance, then Coons, Clune and Sugarman (1970) believed a principle they defined as "fiscal neutrality" would need to be applied in order to give education and its funding the constitutional protection it was deemed to deserve. This principle of fiscal neutrality states, "The quality of public education may not be a function of wealth, other than the wealth of the state as a whole," (Coons, Clune, and Sugarman 1969, 311).

The development of this principle and its testing paralleled the timing of the decision in the *McInnis v. Shapiro* (1968) case. The suit claimed inequities in educational funding in Illinois based on the educational needs of the state's children. The court quickly ruled that the plaintiffs had provided no standards for measuring "educational needs" and that it was therefore an unworkable directive for the courts, although perhaps a worthy guide for legislative policymakers (McInnis v. Shapiro 1968). The Supreme Court affirmed this decision without opinion (McInnis v. Ogilvie 1969).

Despite an outcome that was unfavorable for the plaintiffs, the 1968 *McInnis* case is significant because of its influence on subsequent plaintiff strategies. According to Pincus (1974) the value of utilizing the Coons, Clune, and Sugarman fiscal neutrality standard quickly became apparent to attorneys who had school finance cases pending at the time of the *McInnis* decision. No longer would school finance remedies be sought that emphasized student needs. Instead the court would be petitioned to give education interests equal protection under state and federal constitutions, therefore mandating remedies, but not requiring that the courts outline the particular remedies. The type of legal attack devised by the Coons' team would allow the court to make an assessment of the judicial acceptability of a state's school finance system without prescribing any particular remedy. This approach seemed to hold more promise of success than previous litigation that had sought specific

remedies (Burruss v. Wilkerson 1968, Van Dusartz v. Hatfield 1971, Spano v. Board of Education 1972, Robinson v. Cahill 1972a).

Serrano and Rodriguez

Hack (1978) indicates that the initial legal breakthrough for the school finance reform movement came in 1971. The California Supreme Court accepted Wise and Coon's arguments that public education was a fundamental interest in which children should receive equal protection of the laws (Serrano v. Priest 1971). It ruled in *Serrano v. Priest* (1971) that the state's system for financing public education violated the equal protection clause of the California Constitution and the Fourteenth Amendment of the U. S. Constitution. Gutherie and others (1971) deemed this decision a "joy" for plaintiffs and for the reform network.

Serrano v. Priest (1971) was originally filed in the Los Angeles County Superior Court. Plaintiffs declared that under the present finance system, property-wealthy districts could spend amounts in excess of the minimum at substantially lower tax rates than property-poor districts. The District Attorney sought a "demurrer," contending that even if the plaintiffs' facts were accurate, no law was being violated. The Court concurred and the case was appealed to the California Supreme Court (Serrano v. Priest 1971).

In this appeal, commonly known as *Serrano I* (1971), the Supreme Court reversed the lower court decision and held that plaintiffs' complaint was legally sufficient and remanded the cause to the original trial court for further proceedings. Justice Sullivan's opinion also stated that "if the plaintiffs' allegations were sustained at trial, the financing system must be declared invalid as in violation of state and federal constitutional provisions guaranteeing the equal protection of the laws," (Serrano v. Priest 1971, 930).

Completion of the subsequent trial phase was to occupy several years. Complicating the process was the enactment by the California legislature of a school finance bill, Senate Bill 90, which was intended to meet the equal protection challenge. While the *Serrano* (1971) proceedings continued, the U. S. Supreme Court heard and issued its 1973 decision in a landmark case in Texas, *San Antonio Board of Education v. Rodriguez* (1973).

A case similar to *Serrano*, the *Rodriguez v. San Antonio Independent School District* (1971)challenged the constitutionality of the state school finance system in Texas. However, plaintiffs grounded their arguments solely in the U. S. Constitution, and thus the case was heard in a federal court. The federal district court found for the plaintiff on December 23, 1971, stating that educational opportunity should not be a function of local district wealth (Rodriguez v. San Antonio Board of Education 1971). But on appeal to the U. S. Supreme Court, a March 21, 1973 decision reversed the lower court decision (San Antonio Board of Education v. Rodriguez 1973).

By a five to four decision, the majority found that education was not a "fundamental interest" since it was not explicitly mentioned in the Constitution (San Antonio Board of Education v. Rodriguez 1973). John Pincus (1974) explains that if the Court had found education to be a fundamental interest, then a constitutional test requiring a compelling justification for governmental action would have been appropriate. The failure of the Court to require the strict scrutiny test left the appropriate judicial test to be only that the Texas school finance system possess a "rational basis" for distributing school funds unequally as it did. In other words, the discrimination that resulted from the Texas system had only to be justified as reasonably related to some legitimate state objective. Defendants contended that existing disparities in the distribution of school funds were a consequence of a desire for the preservation of local control. The Supreme Court accepted local control as a rational basis for

the governmental action concerning school finance in Texas (San Antonio Board of Education v. Rodriguez 1973).

As explained by Gutherie and others (1971), another argument used in overturning the lower court decision was that defendants did not readily constitute a suitable class: they were not uniformly poor, nor members of a racial group, nor from geographically identifiable areas. Thus, no so-called legally suspect classification appeared to be involved. A final argument Gutherie and others (1971) describe was the efficiency argument connected with the 1966 *Coleman Report*. The Court argued that there was no convincing evidence that dollars for schools were highly correlated to the quality of pupil services.

According to Hack (1978) this action, at least temporarily, stopped school reform through federal action. The hopes of many school finance reformers for dramatic reform were dashed, and it seemed that the revolution would be abandoned. However, while the *San Antonio Board of Education v. Rodriguez* (1973) decision had negated the validity of the federal constitutional argument for school finance cases, Gutherie and others (1971) contend that *Serrano I* (1971) had made it clear that school finance decisions could be rendered based on state constitutional authority.

Once the basic tenets of a legal attack had been formulated by Wise (1967) and by Coons, Clune and Sugarman (1970), and had been proved effective in *Serrano v. Priest* (1971) Gutherie and others (1971) report that reform efforts proceeded across the states with the courts as the primary vehicle for reform. Research for school finance cases had to be constructed individually for each state due to unique distribution patterns for each state's school finance system as well as differences in state constitutional provisions.

While the judicial system continued to be the major medium of reform, on occasion, a court case itself was not necessary to trigger legislative or

executive branch consideration of reform. Gutherie and others (1971) indicated that often the threat of a well-formulated suit was all that was necessary, but such threats would probably not have been as effective had not similar suits been tried and decided in behalf of plaintiffs elsewhere.

As new cases were being formulated and tried, the *Serrano I* (1971) proceedings continued. The trial court to which the *Serrano I* (1971) decision had remanded the case, rendered its decision in 1974 (Serrano v. Priest 1976). According to Gutherie and others (1971) the court had provided the legislature five years in which to implement a reform system that constrained school district spending within a band of $100 per pupil. This court found the California system to be in violation of the state constitution in spite of legislative efforts to meet the fiscal neutrality requirement (Serrano v. Priest 1976).

This decision was appealed to the state supreme court and on December 30, 1976, the *Serrano II* (1976) decision reaffirmed the trial court action. The legislature then took the court mandate seriously and set about to produce another solution. What ensued was a complex political battle in pursuit of equity. Gutherie and others (1971) reported that after several assembly bills, a senate bill, and a state property tax referendum, *Serrano* (1971) proponents contended that reforms still had not been effective in equalizing school finance resources and threatened to take the case back to court. As the 1980s dawned, the *Serrano v. Priest* (1971) litigation was still not resolved.

Serrano has continued to have considerable national significance. It proved that the equal protection argument could be made on state constitutional grounds, even when the federal argument was overturned. It made it clear that the principle of fiscal neutrality could be articulated in a manner that would enable courts to calculate a judicially manageable remedy. Finally *Serrano* reinforced the view that legislatures would respond responsibly to

judicial school finance mandates although such compliance could not be assumed automatically as seen in *Robinson v.Cahill* (1971-1976).

Questions and Issues Adjudicated by the Courts

Serrano and *Rodriguez*, while significant in the history of school finance litigation because of the legal tenets formulated and applied and the direction given for future litigation, were by no means the only cases to be heard. A decade of court intervention in school finance can be described in terms of the questions and issues adjudicated by the courts. According to Hack (1978) cases tended to relate to alleged inadequacies in specific school financing systems and/or features of the system which may have been unconstitutional. Different issues were combined in various cases, but tended to be drawn from the same pool.

Two major types of constitutional issues emerged in the school finance litigation decided during and after the *Rodriguez* and *Serrano* decisions. The first, based on equal protection clauses of state constitutions, was often found tied to the question of whether education is a fundamental right.

Equal protection challenges alleged that a school finance formula fails to provide equal protection under the law in terms of educational objects such as educational opportunity, educational expenditure, or tax burden. *Serrano* and *Rodriguez* are both examples of this type of case, although *Rodriguez's* federal challenge was overturned. Table 1 lists state finance programs in Connecticut, Wyoming, and Arkansas that were found to violate state equal protection clauses. Courts in Arizona, Washington, and West Virginia found education to be a fundamental right as well, but the state finance plans in the cases listed in table 2 did not necessarily violate the equal protection clauses of state constitutions.

TABLE 1

STATE FINANCE PROGRAM VIOLATES STATE EQUAL PROTECTION CLAUSE

Serrano v. Priest 557 P. 2d 929 (California 1976).

Horton v. Meskill 376 A. 2d 359 (Connecticut 1977).

Washakie County School District No. 1 v. Herschler 606 P. 2d 310 (Wyoming 1980).

Dupree v. Alma School District No. 30 651 S.W. 2d 90 (Arkansas 1983).

TABLE 2

EDUCATION IS A FUNDAMENTAL RIGHT

Shofstall v. Hollins 515 P. 2d 590 (Arizona 1973).

Serrano v. Priest 557 P. 2d 929 (California 1976).

Buse v. Smith 247 N.W. 2d 141 (Wisconsin 1976).

Horton v. Meskill 376 A. 2d 359 (Connecticut 1977).

Seattle School District No. 1 of King County v. State 585 P. 2d 71 (Washington 1978).

Pauley v. Kelly 255 S.E. 2d 859 (West Virginia 1979).

Washakie County School District No. 1 v. Herschler 606 P. 2d 310 (Wyoming 1980).

Dupree v. Alma School District No. 30 651 S.W. 2d 90 (Arkansas 1983).

Other cases did not meet with the hoped for success in their constitutional challenges. Courts in Michigan, Idaho, Oregon, Ohio, Pennsylvania, Georgia, Colorado, and New York in cases chronicled in table 3 found that education is not a fundamental right. Arizona, Michigan, Idaho, Oregon, Ohio, Pennsylvania, Georgia, Colorado, New York, Maryland, and Michigan courts also found no constitutional deficiencies in their state school financing systems in cases listed in table 4. In such cases, the courts have found that wealth-related disparities do exist without violation of constitutional mandates.

TABLE 3

EDUCATION IS NOT A FUNDAMENTAL RIGHT

Robinson v. Cahill 303 A. 2d 273 (New Jersey 1973a).

Milliken v. Green 212 N.W. 2d 711 (Michigan 1973).

Thompson v. Engelking 537 P. 2d 635 (Idaho 1975).

Olsen v. State 554 P. 2d 139 (Oregon 1976).

Board of Education of City School District of City of Cincinnati v. Walter 390 N.E. 2d 813 (Ohio 1979).

Danson v. Casey 399 A. 2d 360 (Pennsylvania 1979).

McDaniel v. Thomas 285 S.E. 2d 156 (Georgia 1981).

Lujan v. Colorado State Board of Education 649 P. 2d 1005 (Colorado 1982).

Board of Education, Levittown v. Nyquist 453 N.Y.S. 2d 643 (New York 1982).

East Jackson Public Schools v. State 348 N.W. 2d 303 (Michigan 1984).

TABLE 4

STATE'S FINANCING SYSTEM IS NOT CONSTITUTIONALLY DEFICIENT

Shofstall v. Hollins 515 P. 2d 590 (Arizona 1973).

Milliken v. Green 212 N.W. 2d 711 (Michigan 1973).

Thompson v. Engelking 537 P. 2d 635 (Idaho 1975).

Olsen v. State 554 P. 2d 139 (Oregon 1976).

Board of Education of City School District of City of Cincinnati v. Walter 390 N.E. 2d 813 (Ohio 1979).

Danson v. Casey 399 A. 2d 360 (Pennsylvania 1979).

McDaniel v. Thomas 285 S.E. 2d 156 (Georgia 1981).

Lujan v. Colorado State Board of Education 649 P. 2d 1005 (Colorado 1982).

Board of Education, Levittown v. Nyquist 453 N.Y.S. 2d 643 (New York 1982).

Somerset County Board of Education v. Hornbeck 458 A. 2d 758 (Maryland 1983).

East Jackson Public Schools v. State 348 N.W. 2d 303 (Michigan 1984).

The second major category of constitutional challenges in school finance cases is that of violation of the education articles of state constitutions. The most common language of such constitutional provisions is the mandate for "thorough and efficient" educational systems. Other wording in state constitutions includes "general and uniform" and "equal" education (Hack 1978). Table 5 indicates that state school finance programs in New Jersey, Connecticut, Washington, West Virginia, and Arkansas were found to violate education

articles of state constitutions. The case which best illustrates this category from the point of view of precedent as well as comprehensive litigation is New Jersey's *Robinson v Cahill* (1972a).

TABLE 5

STATE FINANCE SYSTEM VIOLATES THE EDUCATION ARTICLE OF THE STATE CONSTITUTION

Robinson v. Cahill 303 A. 2d 273 (New Jersey 1973a).

Horton v. Meskill 376 A. 359 (Connecticut 1977).

Seattle School District No. 1 of King County v. State 585 P. 2d 71 (Washington 1978).

Pauley v. Kelly 255 S.E. 2d 859 (West Virginia 1979).

Dupree v. Alma School Dist. No. 30 651 S.W. 2d 90 (Arkansas 1983).

The New Jersey court in *Robinson v. Cahill* (1972a) found the state's present method of financing schools unconstitutional, but on different grounds and with different results from *Serrano* (1971). The state school finance system was found to violate an educational article in the state constitution that requires the legislature to provide a "thorough and efficient" system of free public schools for New Jersey children (Robinson v. Cahill 1972a). This was the first case in which a state supreme court relied on education provisions of a state constitution, rather than on equal protection requirements, to declare a state school financing system unconstitutional.

The New Jersey court found tax bases as well as tax effort to be inadequate and further faulted the state for never having "spelled out the content of the educational opportunity the constitution requires," (Robinson v. Cahill 1973a, 295). In the initial appeal styled *Robinson II* (1973a) the court

upheld the original decision and established a timetable for legislative compliance of the remedy. The New Jersey legislature was reluctant from the outset to implement the court decree. The courts were forced to issue more decisions to ensure legislative compliance with the court ordered remedy (Robinson II 1975a, Robinson IV 1975c, Robinson V 1976A, Robinson VII 1976c).

The Future

As the 1980s draw to a close, the role of the courts in school finance reform continues to be significant in some states (Edgewood v. Kirby 1989, Rose v. Council for Better Education 1989). But the rising tide of litigation that characterized the l970s has ebbed as state legislatures and state political systems have taken a more proactive role in ensuring adequate school financing systems. Because of the complexity of the political, economical, and financial issues involved, easy solutions are not available for these state governmental bodies, but the activity toward achieving equity in school financing is destined to continue.

Chapter Three

The Measurement of Equity

Since the beginning of the courts' involvement in school finance and the equity of school finance plans, almost every state in the U. S. has modified its public school finance plan. Some state legislatures have been proactive, revising plans in attempts to distribute either school revenue or the tax burden associated with it more equitably. Other states have reacted to court mandates to improve school finance systems that failed to meet state constitutional requirements concerning education. The aim in both situations has been to re-design or improve methods for providing the financial support for public schools in order to achieve more equity among the students served by the school systems.

The definition of equity continues to pose a problem, for no single definition of the concept has been agreed upon. For the purpose of data analysis, however, most agree that the most easily measured equity concept is that of per-pupil expenditures. Some analysts include data relative to the equity of tax burdens, but for the purpose of this study, per-pupil expenditures will form the basis of analysis.

A comprehensive review of the analyses of state school finance plans indicates that the analyses fall into two categories. A single state's plan may have been analyzed for the effect it has had on per-pupil expenditures, or a particular type of school finance plan may have been analyzed for its effect on per-pupil expenditures in several different state settings.

Six Basic Finance Plans

In his *Introduction to School Finance: Technique and Social Policy*, Thomas Jones (1985) defines and analyzes six basic plans for state school

finance systems. Each state in the United States uses one or a combination of these six plans to provide financial support for its schools. The first and oldest type of aid plan was used widely during the first few decades of this century. The flat grant distributes state funds to school districts without regard to amounts that may be generated locally. Every school district receives the same sum per pupil or other funding unit such as personnel or instructional units. Because there is no consideration of district wealth in the distribution of flat grant aid, Jones does not consider this type of funding to be strongly equalizing.

According to Jones (1985) the flat grant is considered antiquated and out of favor. Initially, he reports, it represented an improvement over matching grants, but better, more equalizing plans tend to be favored today. Flat grants are still used by some states for the distribution of certain funds, but are generally combined with other more equalizing plans for a total finance system.

A second type of plan, full state funding, is the only plan Jones deems capable of eliminating all local differences in both spending and taxing. Equity proponents hold that this type of funding plan, where all school funds are collected at the state level, eliminates the inherent inequities of a funding system based on local school property taxes (Jones 1985). State funds are distributed to school districts on an equal basis, and unlike the flat grant, full state funding does not allow local districts to spend local funds for education. Advocates of this type of plan also contend that state control of education eliminates inefficiency and increases accountability for learner outcomes (Jones 1985).

Jones (1985) indicates that the pros and cons of full state funding are largely hypothetical because only the state of Hawaii currently utilizes this system. All, he says, are not convinced that greater state control over

education represents anything more than excessive bureaucracy and regimentation. But one cannot disagree that full state funding eliminates all disparities in local wealth and effort. Jones predicts better evaluations of full state funding as more and more states impose limits on the use of the local school property tax.

By the late 1970s the foundation plan had proved to be the most popular of all state aid plans. But according to Jones (1985), in recent years its popularity has declined due to its inherent tax and spending inequities. The foundation plan sets minimum local property tax rates and minimum spending levels for each district within a state school system. The minimum is supposed to be set at a level to provide an adequate educational level. Local districts are allowed to exceed minimums by raising more local funds for education, but the minimum is, in theory, to be high enough so as not to overburden local taxpayers. In the concept and definition of an adequate minimum lies the problem with this plan (Jones 1985).

If the foundation level is kept fairly high, then a fair degree of equity can be maintained. Foundation plan proponents contend that some inequity benefits education as a whole, as districts which choose to tax and spend more will continually improve education through adaptation, innovation, and expanded education services. But when state funding levels are too low poor school districts fall too far behind wealthy ones and inequities become greater (Jones 1985).

Historically states have not raised their spending levels sufficiently over the years. Advocates of the foundation plan may find it the "lesser of the evils." The idea of state spending minimums plus local leeway still has strong appeal. But the possible inequities cannot be ignored (Jones 1985).

Two financing plans that are very similar in rationale are percentage equalizing and the guaranteed tax base (GTB). Developed in the 1920s,

percentage equalizing is an older and arithmetically more complex form of the guaranteed tax base. Both plans are matching plans. In percentage equalizing the state guarantees to match local districts' prior year spending levels. Jones defines the guaranteed tax base as a "reward for effort" plan (Jones 1985, 119). The state pays a percentage of the total cost of education in inverse proportion to the amount of tax effort the district is willing to expend. The GTB differs from the foundation plan in that it shares in the total cost rather than in only a minimum cost.

Differences between the GTB and percentage equalizing are insignificant. The GTB's arithmetic simplicity and its focus on taxing rather than spending have caused its popularity to increase while that of percentage equalizing decreases. Jones (1985) considers percentage equalizing not as a distinct school aid plan, but rather as another way of writing the GTB. He predicts that the simpler GTB will continue to be more popular, but doubts that percentage equalizing will become totally obsolete (Jones 1985).

One problem with the guaranteed tax base is that it sets no maximums and no minimums. Under other plans, a state must deal with the question of minimum adequacy. The GTB's answer to efficient and fair tax spending levels has been to turn the problem over to the local authorities, making it very popular with local control advocates. In practice, the GTB has been unable to guarantee the tax base of every district at the level of the state's richest district and to permit every local district to tax at any rate it wants. Full reward for effort is lost if the state limits its guarantee level below that of the richest district, and local control is limited if the state imposes tax rate ceilings (Jones 1985).

A final plan described by Jones (1985) requires the state to set a guaranteed wealth level, as in the GTB, and then to recapture some revenues from the districts that are wealthier than the state-set level. Power equalizing, the latest and possibly last major refinement of percentage equalizing, was

first advocated in the early 1970s. Spending differences may occur under power equalizing, but its objective is not to equalize spending, but to equalize spending power per dollar of tax across all districts. Jones (1985) cites the "payback" provision as the only difference between power equalizing and the GTB. Without it, power equalizing would simply be a guaranteed tax base.

This type of plan resolves what has been a problem with matching grants. The matching principle cannot function properly when state funds are not available to match every district at the level of the wealthiest district. Power equalizing solves this problem by taking wealth from school districts who can afford it. This alternative is not, however, very politically acceptable. Local districts are accustomed to getting revenue, not giving it. So, according to Jones (1985), the ultimate usefulness of the power equalizing plan will depend in large part upon its acceptance in the political process.

The six plans described—flat grants, full state funding, foundation, percentage equalizing, guaranteed tax base, and power equalizing—are only prototypes. Jones (1985, 98) states, "There may be said to be fifty state school finance plans." Each state makes adaptations in a plan to meet its goals and political climate. Ultimately each state's plan can be best analyzed and understood by fully understanding the six prototypes defined by Jones.

The Measurement of Equity

For Berne and Leanna Stiefel (1984) the measurement of equity in school finance plans is couched in the definition of equity. They suggest a framework for analysis that allows both identification of important dimensions of a particular plan and quantitative exploration of the plan. Their model is organized around the answers to four questions that attempt to define equity for each situation or plan being analyzed:

1. Who? What is the makeup of the groups for which school finance systems should be equitable?

2. What? What services, resources, or more generally, objects should be distributed fairly among members of the groups?

3. How? What principles should be used to determine whether a particular distribution is equitable?

4. How much? What quantitative measures should be used to assess the degree of equity? (Berne and Stiefel 1984, 7).

The "Who" question can be answered with either of two groups, children or taxpayers. In analyzing a school finance plan's degree of equity, Berne and Stiefel (1984) and most others writing in this field focus on equality for children. Equity for children will be the primary issue of this study as well.

Objects of the equity vary. The analysis may focus on inputs or resources such as dollars, price adjusted dollars, and physical resources that are combined to educate children. Short-term outputs or results of schooling such as student achievement or behavioral output may be the equity concern. A more difficult to measure and thus less frequently addressed object is that of the long-term outcomes of learning such as occupational status, income, and personal satisfaction. There are no easy answers to the choice of objects for equity studies. Analysts and policymakers must instead consider value issues as well as measurement problems in deciding what should be equitably distributed (Berne and Stiefel 1984).

Once a particular object has been selected, further analysis requires the application of one or more of three broad equity principles in order to draw conclusions about whether the object is fairly distributed. Application of the principle of horizontal equity would indicate a concern for equal treatment of equals. This means that students who are alike should receive equal shares of the equity object. The problem with this principle is that children are not

substantially equal. Therefore, Berne and Steifel (1984) suggest this principle is more appropriately applied to the analysis of subgroups of children where equality can be agreed upon.

The principle of vertical equity recognizes the differences in children and suggests unequal treatment of unequals. Legitimate differences must be selected and the nature and extent of the appropriate unequal treatment determined. Those who support the choice of short-term outputs or long-term outcomes as objects against which to measure the achievement of equity believe that equal outputs or outcomes are impossible without unequal treatment with respect to inputs (Berne and Stiefel (1984).

Equal opportunity is the third equity principle defined by Berne and Stiefel (1984). Since the 1971 *Serrano v. Priest* litigation in California, this principle has been widely applied in evaluating the equity of various state school finance plans. This principle as defined by Coons, Clune, and Sugarman (1969), can be called a fiscal neutrality principle. It is essentially a negative yardstick, holding that, "The quality of a child's schooling shall not be a function of wealth, other than the wealth of the state as a whole," (Coons, Clune, and Sugarman 1969, 311).

The final step in Berne and Stiefel's (1984) framework for assessment of equity is the selection of appropriate measures to determine the degree of equity or inequity. Alternative measures exist for each equity principle and are selected based on value judgments made by analysts and policymakers.

Measurements of Horizontal Equity

Six measures which represent the range of value choices to measure horizontal equity include the range, the restricted range, the federal range ratio, the McLoone index, the coefficient of variation, and the Gini coefficient. Each of these measures assesses the unequal treatment of unequals, or the

degree of inequity in a distribution of equity objects (Berne and Stiefel 1984). (For detailed definitions of each of these measures see Berne and Stiefel 1984, 56, 65-68).

While there can be instances when all these measures agree, in real empirical analysis, complete agreement among the measures may not occur. Differences in the results of the measures are related to values as to whether the measure includes all of the pupils (coefficient of variation, Gini coefficient, range) or part (federal range ratio, restricted range); whether the measure focuses on the lower part of the distribution (McLoone Index); and how the measure responds to equal percentage increases (Berne and Stiefel 1984).

Berne and Stiefel (1984) propose the use of multiple measures of horizontal equity, not as a means to lead to consensus, but as a further analysis tool which causes discussion and thus better understanding of the sources of disagreement. By fully understanding all of these sources of disagreement, analysis of a particular finance plan is more in-depth and much more complete than when using only a single meaure.

Measures ofVertical Equity

Two types of statistics are commonly used to measure vertical equity. One is a dispersion statistic and the other is correlational. The first step in attempting to measure vertical equity is to make choices about the characteristics that are used to classify "unequals" and the differences in objects that each class of unequals should receive. For instance, per-pupil dollar inputs may be considered the independent variable and the presence or absence of handicapping conditions might be considered the dependent variable. Then an appropriate measure must be selected.

Once the decision concerning characteristics of unequals has been made, the same dispersion measures used to assess horizontal equity can be

reformulated to work with vertical equity concerns. The reformulation consists of a weighting process and thus the measures are called weighted dispersion measures. A weight, which expresses the amount of the object that the group should receive compared to a baseline group, is established for each different group of students for whom there are vertical equity concerns.

Then the number of pupils times their assigned weight is computed for each district. Total dollar inputs for each district are converted into dollar inputs per weighted pupil by dividing total inputs by the number of weighted pupils. Finally, a dispersion measure is chosen and computed using dollar inputs per weighted pupil and weighted-pupil count. Any of the dispersion measures described for use with horizontal equity considerations can be converted in this manner (Berne and Stiefel 1984).

Weighted dispersion measures describe the distribution of objects after adjusting for pupil differences. But often data indicates dispersion by district rather than by pupil. Berne and Stiefel (1984) point out that weighted dispersion measures give a district credit in a financing formula for having a special category because of the weighting of a group of students, but there is no indication as to the actual distribution of the object among individual pupils.

Correlation statistics can be employed with vertical equity concerns to quantify the relationship between the level of objects in districts and the number of pupils in legitimate special categories in each district (Berne and Stiefel 1984). Thus one can test the vertical equity assumption that requires that more of the objects to be distributed be present in districts with greater numbers of pupils in special categories.

Using the object as the dependent variable and the percent of "special" students in a district as the independent variable as an example, four measures based on a simple regression can be employed to assess vertical equity. These measures include the correlation, the simple slope, the simple

elasticity, and the simple adjusted relationship measure. When interpreting the relationship, the arithmetic sign is significant. If the estimated regression line has a positive slope, then the correlation, simple elasticity, and simple adjusted relationship measure will be positive as well. Such regressions can be interpreted to indicate that districts with higher percentages of special pupils have higher per-pupil dollar inputs (Berne and Stiefel 1984, 89).

The problem with this type of measure arises when one attempts to rank states in terms of vertical equity. When the correlations in both states exceed the desired relationship, it is difficult to determine if one is more equitable than the other. The districts' uses of the objects are unknown, making a comparison of states most difficult. A second problem is that correlation measures may disagree with weighted dispersion measures. Therefore, Berne and Stiefel (1984) strongly recommend the use of both sets of measures, dispersion and correlational, when analyzing vertical equity.

Measures of Equal Opportunity

The equal opportunity principle developed by Coons, Clune and Sugarman (1970) states that there should be no relationship between a child's education and the wealth available to fund it, other than that of the wealth of the state as a whole. This principle is measured by the relationship between two characteristics of a school finance plan. Equity exists when there is no relationship between the two. Because the existence of a relationship between spending and wealth continues to be an important issue in school finance, Berne and Stiefel (1984) utilize per pupil dollar inputs as the dependent variable and per pupil property values as the independent variable to explain the various measures of equal opportunity. As is the case with the other equity principles, the choice of measures can affect the assessment.

The measures used to assess equal opportunity are correlation statis-

tics. The four measures described by Berne and Stiefel (1984) are based on a simple regression using the percent of "special" students in a district as the independent variable and the object distributed as the dependent variable. These measures include the correlation, the simple slope, the simple elasticity, and the simple adjusted relationship measure. Berne and Stiefel's focus is on the differences in the interpretations of these four measures rather than on the calculations of them.

Working through an analysis of a hypothetical state finance plan, Berne and Stiefel (1984) demonstrate that neither the addition of a constant amount to property values or inputs, nor a constant percentage change in the values or inputs changes the correlation. The simple slope is shown to change as a result of constant percentage changes in the independent and dependent variables but is not affected by equal additions to the variables. Since the simple elasticity is the slope multiplied by the ratio of means, it is unaffected by percentage changes in the independent and dependent variables, but changes as a result of constant additions to the variables. Only equal additions to the dependent variable affect the simple adjusted relationship measure.

Another important difference among the correlation measures is whether the relationship is assessed in terms of "goodness of fit" or of the magnitude of the relationship. The correlation is a "goodness of fit" measure, while the simple slope and the simple elasticity are assessments of the magnitude of the relationship. Again Berne and Stiefel (1984) demonstrate through hypothetical examples that the different types of measures can result in contradictory empirical findings. They believe that many analysts prefer magnitude-of-the-relationship measures, but cite extensive use of the correlation to show that there is little agreement as to which type of measure is better.

Through various examples Berne and Stiefel (1984) demonstrate the conflicting assessments of equal opportunity that arise when different meas-

ures are used. Since it is unlikely that analysts and policymakers can agree on a single, "most appropriate" correlation measure, Berne and Stiefel again strongly recommend the use of more than one measure in the assessment of equal opportunity.

Berne and Stiefel (1984) have demonstrated that the choice of measures can affect the outcomes of equity assessments for all three principles and with varying objects and units of analysis. It is very important, then, when studying an analysis of a school finance plan that the reader not draw conclusions about the plan beyond what the data indicates. A particular aspect or characteristic of a plan may be judged to be equitable for one principle based on a selected measure, object, and unit of analysis while being judged inequitable if another measure, object or unit of analysis is employed. The key to proper analysis, and perhaps to the design of equitable state school finance plans, is precise definition of the equity issues to be considered prior to analysis or evaluation.

Data Analysis

Analysis of individual funding formulas or plans yields some information that may be helpful to state school officials in determining the best type of finance plan for their state; but most important, this type of analysis raises the issue of the differences that exist in each state's school system and therefore, the need to carefully define equity in light of the factors that will affect a particular plan's implementation.

Augenblick and McGuire (1983) offer several considerations for equity analysis. First, equity goals of different states do vary and they suggest that it is difficult to assess the equity of a school finance system without understanding the equity goals of its policymakers. Second, in measuring equity it is important to account for a certain amount of revenue variation among school districts that seems to be appropriate either because of differing needs or

because some reasonable level of local control is considered legitimate.

Third, Augenblick and McGuire (1983) propose that school finance systems change over time, so equity assessments are of little value in and of themselves unless these changes and their effect on equity are understood so that specific changes can be made to remedy specific problems. Finally, equity cannot be evaluated in isolation. The equitable distribution of inadequate state support is not an appropriate objective of a school finance system The goal of equity must be balanced against other objectives, particularly adequacy and local control (Augenblick and McGuire 1983).

These considerations seem to be validated when other state school finance plans are analyzed. A review of the analysis of the equity of selected state school finance plans is contained in table 6. The data indicates a wide variety of statistics used to measure as wide a variety of state school finance plans. Few of the plans achieved the desired equity goals, mostly due to variations in economic conditions over time.

Results

The majority of education funds in states for which plans were analyzed were distributed through some type of foundation formula. Some of these foundation plans were combined with power equalizing provisions or with flat grants. A heavy reliance on local property taxes as the major source for educational funding existed throughout the states analyzed. Only one state, New Mexico, has greatly limited its reliance on local property taxes and assumed almost one hundred percent of the burden for educational resources at the state level.

A full range of the statistics described by Berne and Stiefel (1984) were used to measure the extent to which the various state plans met their intended equity goals. Appropriate variations in the type of statistical analysis were indicated according to the equity goals being assessed.

Results from the statistical analyses indicated that two-thirds of the state plans analyzed produced no significant improvements in educational equity over plans previously in place in those states. Some of these analyses even indicated a worsening of equity as one moved farther in years away from reforms. A few states showed some gains in equity, but only when state funding was sufficient to fully fund reform plans. This would seem to indicate that little difference in equity is achieved just by changing the type of funding plan or formula at work in a particular state.

Only two states showed significant improvements in equity goals. South Carolina data indicated across-the-board improvements in eleven univariate measures and four bivariate measures of equity. A change from a flat-grants plan to a foundation plan and increased state funding appeared to be responsible for the improvements. But the generalizability of these data is limited by the fact that data for only two years were compared.

One state among the reform states, New Mexico, has come closest to

reaching its equity goals. While a change from a flat grant approach to distribution to a foundation approach has helped to equalize revenue distribution, the most significant factor in achieving its equity goals seems to be New Mexico's almost full assumption of the responsibility for providing educational funding. Improvements were shown to have been less dependent on the type of distributional formula and more on the amount of available state aid.

No conclusions about the "best" kind of state school finance formula or plan can be drawn from the data. This would seem consistent with other research data that demonstrates that each of the four most common types of funding formulas—minimum foundation, district power equalizing, percentage equalizing, and guaranteed tax base—produce identical revenues in their purest forms (Walker 1988b). The type of plan necessary to achieve equity in any given state seems instead to be dependent on the state's definition of equity and the economic conditions exist at the time of analysis. One might conclude from the data presented in table 6 that increased state funding is the most significant factor in achieving equity goals for public schools.

Chapter Four

TEXAS: THE EQUITY ISSUE REVISITED

The early development of the Texas public education system was characterized by a series of sporadic increases in state involvement entertwined with an emphasis on local control of the public schools (Lyndon B. Johnson School of Public Affairs 1985). After the turn of the century, resistance to state intervention began to decrease, and concern with the equalization of educational resources increased. In 1915 the legislature appropriated equalization aid for rural districts, shifting the state's role from merely encouraging local tax effort to providing funding for equalization.

One of the most important pieces of school finance legislation was the 1949 Gilmer-Aikin Act which established the minimum foundation plan for state aid to public education (Lyndon B. Johnson School of Public Affairs 1985). The goal of the Gilmer-Aikin plan was that "each student should be given an equal minimum educational opportunity financed by equalized local tax effort and supplemented by state aid sufficient to compensate for the variations in local taxpaying ability," (Thomas and Walker 1982).

Under the foundation plan, districts were permitted to spend more than the minimum if they chose to provide more local funds for education. It soon became apparent that substantial differences in spending were occurring in districts throughout Texas. After the 1971 *Serrano v. Priest* decision,in litigation that had challenged the funding system in California that allowed differences among districts due to variations in local wealth, a decision was reached in a similar suit in Texas (Rodriguez v. San Antonio 1971).

Unlike the California challenge, the Texas suit was argued on the grounds that the system of school finance in Texas violated the equal protection provisions of the United States Constitution, rather than the state

constitution. In *Rodriguez v. San Antonio* (1971) a U. S. District court ruled that the Texas education finance system was unconstitutional, but the U. S. Supreme Court reversed the decision in 1973 (San Antonio v. Rodriguez). The Supreme Court declared the Texas system chaotic and unjust, but not in violation of the federal constitution (San Antonio v. Rodriguez 1973). Despite the decision against the plaintiffs, the issues in the *Rodriguez* case had a continuing influence on Texas public school finance.

Following the *Rodriguez* decision the Office of Educational Research and Planning was created within the Texas Education Agency to correct inequalities that had come to light in Rodriguez (Lyndon B. Johnson School of Public Affairs 1985). In 1975 the legislature passed House Bill 1126 to equalize resources by increasing equalization aid to property-poor districts. Because of the failure of this bill to achieve the desired equalization, Senate Bill 1 was enacted in 1977 to further revise equalization aid by adding one billion dollars to the foundation school program, revising local fund assignments, and providing funds for vocational education and special education programs. A further attempt to equalize district resources was passed in 1979. Senate Bill 350 further expanded the foundation program, readjusted the local fund assignment and a minimum aid adjustment, and provided more support services to small districts (Lyndon B. Johnson School of Public Affairs 1985).

The failure of these efforts to equalize school funding and new litigation prodded the Texas legislature into taking actions that led to House Bill 72. In 1982, Governor Mark White was elected with the support of teachers on a platform in which he pledged to legislate an increase in state aid for teacher salaries. But the 1983 legislature was unable to pass such an increase in a climate of declining revenues and opposition to a tax increase. Instead the legislature authorized the Select Committee on Public Education (SCOPE) to study the finance system of the public schools in Texas and to make

recommendations for its improvement to be considered at a 1984 special session of the legislature (Lyndon B. Johnson School of Public Affairs 1985).

On May 23, 1984, a suit was filed in state court by the Mexican American Legal Defense and Educational Fund (Lyndon B. Johnson School of Public Affairs 1985). This suit, *Edgewood v. Bynum*, included as plaintiffs the Edgewood Independent School District near San Antonio and a number of other low-wealth districts. Plaintiffs claimed that the Texas public education system violated the education provisions and the equal protection clause of the state constitution because children in property-poor school districts were deprived of an education substantially equal to children in property-wealthier districts (Lyndon B. Johnson School of Public Affairs 1985).

A final verdict in the *Edgewood* case would normally have taken several years, but with the recent success of similar school finance challenges, merely the threat of an adverse ruling seemed to have been enough to motivate the legislature to consider fiscal measures to reduce spending disparities among districts. The SCOPE recommendations and the *Edgewood* challenge combined to influence passage of House Bill 72 during a brief June 4 to July 3 special session of the Texas legislature in 1984 (Lyndon B. Johnson School of Public Affairs 1985).

While the focus of the *Edgewood* case was school finance inequities, SCOPE, influenced by *A Nation at Risk*, focused on excellence as well as equity in education. In the short time the legislature spent in special session, the process of bargaining and compromising over specific provisions of House Bill 72 was complex and hurried (Lyndon B. Johnson School of Public Affairs 1985). The bill that emerged represented the compromise among many groups—those demanding equalization of funds, those interested in improving the quality of teaching, those who had pledged to increase teacher salaries, and those threatened by reform.

According to analysts, House Bill 72 was a "highly centralized, top-down reform directed by the state's political leadership and a few influential individuals like entrepreneur, H. Ross Perot," (Lyndon B. Johnson School of Public Affairs 1985, xviii). There was little consultation with local educators and almost no participation by parents and other interested citizens. It seemed that the legislature hoped that the equalization measures in House Bill 72 would be sufficient to satisfy the *Edgewood v. Bynum* complaint, while the provisions aimed at improving the quality of teaching and the achievement of students would satisfy other groups concerned with excellence (Lyndon B. Johnson School of Public Affairs 1985, xviii).

In 1985 the Lyndon B. Johnson School of Public Affairs published the Texas School Finance Policy Research Project report *The Initial Effects of House Bill 72 on Texas Public Schools: The Challenges of Equity and Effectiveness.* Of particular interest in this work is the analysis of the financial measures in House Bill 72 that were intended to equalize spending among districts by increasing state funds to poor districts while reducing aid to wealthy districts. The structure of financing under House Bill 72 changed from state aid based on the number of personnel employed to state aid based on the number of students in average daily attendance (ADA). The basic allotment per ADA was set at $1,290 per student for 1984-85 and raised to $1,350 per student each year thereafter. A district's total state aid, however, was determined by a number of adjustments to the basic allotment.

House Bill 72 provided adjustments in state aid by providing for additional aid to small and sparsely populated districts, including adjustments for the costs of special programs, and adjusting the cost-of-living index called the price differential index (PDI). However, none of these adjustments to the basic allotment had an equalizing effect. The equalizing power of the bill came from the calculation of a district's local share, which is higher for wealthy districts

than for poor districts. Total state aid was calculated by determining the adjusted basic allotment and then subtracting the local share. Because the local share depended on the ratio of district property value per pupil to statewide property value per pupil, the amount of state aid for poor districts was substantially higher (Lyndon B. Johnson School of Public Affairs 1985).

Another equalization provision in House Bill 72 was the enrichment equalization allotment (EEA) which provided incentive for moderate and low wealth districts to increase their local tax rates to enrich their educational offerings. The experienced teacher allotment (ETA) was intended to partially compensate districts with many experienced teachers for their high salary costs. Poor districts could receive more ETA because one component of it was based on the ratio of the district's property value per pupil to the state average property value per pupil.

A final provision of the financing structure under House Bill 72 undermined the equalization intent of the bill as a whole. The equalization transition entitlement (ETE) was a save-harmless provision designed to moderate the effects of House Bill 72 for those very wealthy districts whose state aid would be reduced for the years 1984-85 through 1986-87. All ETE went to districts above the median wealth level, and about half went to the wealthiest five percent of districts.

Analysis of the initial effects of these financing provisions of House Bill 72 was based on data collected by the Texas Association of School Boards (TASB) and the Texas Association of School Administrators (TASA) and on data available from the Texas Education Agency (Lyndon B. Johnson School of Public Affairs 1985). The data indicated that in the first year after House Bill 72, both expenditure differences and differences in teacher salaries between rich and poor districts had narrowed, but not vanished. Substantial differences remained between rich and poor districts.

Despite the competition for shrinking resources, House Bill 72 survived the 1985 legislative session with no funding cuts. But it became clear that the sagging economy would produce no new funding for schools in the near future. It seemed likely that new funds for schools would be available only if new taxes or tax increases were enacted.

House Bill 72 mandated several changes and programs without fully funding the requirements. A report by the Lyndon B. Johnson School of Public Affairs (1985, 20) predicted that the costs of such mandates as the Texas Educational Assessment of Minimum Skills (TEAMS) tests, the extension of the maximum class size to grades three and four beginning in 1988, the extension of the career ladder to levels III and IV in subsequent years, and the requirement of a summer preschool program beginning in the summer of 1985 would negatively affect districts in light of level or declining state funds. Wealthier districts have the ability to generate local funds to pay for state mandated programs and changes, but poorer districts would likely have to pay for new requirements from funds that would otherwise go for normal costs of instruction. Therefore, any initial reduction in spending disparities realized by House Bill 72 were predicted to be negated by the underfunded or unfunded program costs imposed by other mandates in the bill.

The conclusion, in the Lyndon B. Johnson School of Public Affairs (1985) report, was that equity will remain a problem in Texas. Expenditure differences were not eliminated by House Bill 72, and they may start to grow wider as the equalizing power of the bill is diluted in the future. The report suggests that the only real solutions will be increases in state aid, together with revisions in the patterns of aid among districts (Lyndon B. Johnson School of Public Affairs 1985, 22).

As predicted by the Lyndon B. Johnson School of Public Affairs (1985) report, the financial picture for Texas schools did not improve. Plaintiffs in the

1984 *Edgewood v. Bynum* case once again sought legal remedies for the continuing inequities caused by the system of financing public education in Texas. The new litigation, *Edgewood v. Kirby* (1987), challenged the Texas public school finance system on the grounds that it violated (1) the equal protection clause, (2) the equal rights amendment, (3) the Texas Education Clause, and (4) the Texas Uniform Tax Provision of the Texas Constitution. In the final judgment filed June 1, 1987, the district court found in favor of the plaintiffs on the first three constitutional challenges and designated September 1, 1989 as the deadline for bringing the school finance system up to constitutional standards (Edgewood v. Kirby 1987).

On January 27, 1988 Texas Governor William P. Clements, Jr. issued an executive order establishing the Select Committee on Public Education (SCOPE) and charged it with the following responsibilities:

> **(1) examine the organization and management of all levels of the education system, (2) examine the financing of public education (3) examine levels of student performance to ensure all students are meeting or exceeding the educational standards, and (4) make recommendations to the Governor, Lieutenant Governor, and Speaker of the Texas House of Representatives regarding necessary legislation or actions by the Governor's Office and Legislature which will aid the State in the development of an improved educational system (Summary Report of the Select Committee on Education 1988, 3).**

The order required the committee to make a written report of its activities and recommendations by January 1, 1989.

Before the Select Committee on Public Education could issue its report, a ruling was handed down on the appeal of *Edgewood v. Kirby* (1987). On December 14, 1988, the Third Court of Appeals overturned the district court decision that the Texas school finance system is unconstitutional (Kirby v.

Edgewood 1988). But the Select Committee issued its report in January, 1988, as required allowing the court decision to have little effect on its recommendations (Summary Report of the Select Committee on Public Education 1988).

The Select Committee reported on the three areas designated by the Governor—organization and management of the schools, financing of the schools, and student performance in the schools. No changes were recommended in the organization and management of the Texas public education system. The Select Committee endorsed the current Texas Education Agency accreditation system together with a continuing increase in local accountability. It recommended that state emphasis should be on educational objectives and accountability standards while local emphasis should focus on ways and means to achieve those results (Jenkins 1989, 1).

In the area of financing public education, the Select Committee developed three recommended options to significantly improve equity. (For a complete description of these options see the Summary Report of the Select Committee on Public Education 1988, 4-8). All continue the concept of the Foundation School Program with opportunity for local enhancement. All contain provisions for a local share and a state supplement designed to make total funds available to any district more a function of local tax effort than local property wealth. However, the committee reported that none of the options meet the strictest interpretation of the original court order requiring one-hundred percent equity (Edgewood v. Kirby 1987). The Select Committee challenged the executive and legislative branches to initiate and continue the trend toward equity and excellence initiated by H B.I 72 (Jenkins 1989, 2).

The Select Committee developed numerous new initiatives, incentives and programs to improve student performance and the quality of education. (For details of these programs, see the Summary Report of the Select

Committee on Education 1988, 10-13). The committee stressed that improvements in funding, facilities, and equity would have little meaning unless student performance is improved as a result (Jenkins 1989, 2-3).

Larry Jenkins, Chairman of the Select Committee on Public Education, indicated the need for reform whether or not the court mandates it. In his letter to Governor Clements transmitting the final report of the Select Committee, Jenkins wrote:

> **In performing this assignment as your chairman, I have become convinced that the time is here for a major examination and restructuring of our educational system as many of the other top states in the country are doing. This nation, and this state, remain "At-Risk" and major improvement of the magnitude required by today's competitive world will not come from minor reforms and upgrades, regardless of how well-intentioned they may be. Such a major examination will require full and active participation by the education and business community who has a vital stake in the outcome, and the tax paying community who must provide the financial support to this crucial investment. We need a "Maximum Effort" to achieve our basic goal: Texas Educational Excellence For All Students (Jenkins 1989, 4).**

The Supreme Court of Texas affirmed the 1987 district court decision in *Edgewood v. Kirby* on October 2, 1989, finding the Texas public education finance system to be in violation of the state constitution (Edgewood v. Kirby 1989). This decision reversed the 1988 Court of Appeals decision and once again, Texas policymakers are faced with a court-mandated deadline for improving the equity of the state school finance system. In the words of Justice Oscar H. Mauzy, "A remedy is long overdue. The legislature must take immediate action," (Edgewood v. Kirby 1989, 16).

As a new decade begins, plaintiffs have yet to see a satisfactory solution

to a system of financing that favors property-rich districts over the property-poor ones. With a May 1, 1990, deadline imposed by the state Supreme Court, Texas has before it the challenge that many other states have failed to meet: to determine what is equitable in terms of educational opportunity and how to achieve it. There are no easy answers to such a complex issue.

Equity Through Distribution Formulas

Walker (1988b) has demonstrated that the commutative nature of the basic elements of each of the four common school funding formulas—foundation program, guaranteed tax base, percentage equalizing, and district power equalization—causes them to be mathematically equivalent. (For mathematical examples see Walker 1988b, 4-6).

According to Walker (1988b) modifications to the basic formulas are common and will vary from state to state. In general, if applied equally to all of the basic formulas, modifications that arise from minimum aid provisions, save harmless clauses, categorical aid, definitions of local fiscal capacity, and definitions of educational need, will not affect their mathematical equivalency. However, how a state treats any of these modifications can alter the equivalence of the formulas and play a role in the equity of the finance system.

Each formula, though arithmetically equivalent, highlights different elements of wealth, need, tax effort, tax yield, and inclusiveness, and each formula has both advantages and disadvantages. (See Walker 1988b and Jones 1985 for further discussion of the advantages and disadvantages of the basic funding formulas). "The ideal model would combine the positive features of two or more conceptual models while minimizing the disadvantages of each," (Walker 1988b, 10).

A Question of Definition

If the distribution formulas are mathematically equivalent, then the goal of equity in school finance cannot be achieved solely by manipulating a particular funding formula. Berne and Stiefel (1984) contend that the goal of equity can only be achieved if the term "equity" is first clearly defined. As described by Berne and Stiefel (1984), determining equity in school finance has more to do with goal-setting and planning than it does with implementation of a particular formula designed to achieve equity.

Another problem arises in defining equity when equity issues enter the political arena. Definition of equity goals, or more simply put, consensus about the answers to Berne and Stiefel's questions, is difficult in the context of a state's political and economic system because of the competition among various special interest groups. As a result, the efforts to reform school finance systems in many states have been piecemeal, emotional, and for the most part, unsuccessful in achieving any greater level of equity (see table 6).

When the equity of a school finance system is challenged in court, the results seem to be equally unsatisfactory in achieving improved equity. The functions of the court in school finance cases have been to set standards, define roles, prescribe relationships and mandate implementation of procedures to resolve specific problems and issues (Hack 1978). The court does not issue opinions as to how a state shall modify its school finance system toward the goal of greater equity. Instead, the court sets criteria which must be met in order for the finance system in question to become legal or constitutional. Through this process the court defines constitutional terms such as "thorough" and "efficient", but the definition of equity remains elusive.

Only in New Mexico, where it has been a long established priority in government for the state to assume the primary responsibility for the education of its children, has the goal of equity come close to being achieved. Since the

1930's, policymakers in New Mexico have pursued two primary goals of school finance equalization: (1) to promote fiscal neutrality by reducing the relationship between per pupil revenue and school district property wealth; and (2) to reduce disparities in per pupil revenue, and thus expenditures among school districts (King 1983, 75).

Nine different distribution plans were enacted between 1934 and 1974 in New Mexico. While most states rely heavily on the local property tax to fund education, the trend in New Mexico has been one of limitation and uniformity. The primary responsibility for providing education funds shifted from local to state coffers early in the state's history. Residents saw a transition to a uniform millage rate in 1974 and another transition to nearly full state funding in 1981. But the issues of funding sources and distribution methods are secondary to the state's goals for education. Funding sources have changed with the economy and distribution plans have been modified as demanded by demographics and current politics. But the goals for New Mexico's public education system remain constant, and therefore, equity in the state is attainable (King 1983).

Can Equity Be Achieved?

Recent developments in Kentucky have found its state supreme court deciding that the state's entire system of common schools and the method for financing that system are unconstitutional (Rose v. Council for Better Education 1989). Judicial criteria to ensure a constitutional educational system must be met by the time the General Assembly adjourns its regular session in 1990. Consistent with other courts which have found state school finance systems unconstitutional, the Kentucky court declined to instruct the General Assembly as to how to achieve a constitutional educational system. At issue instead, is the definition of the term "efficient" as used in the Kentucky constitution, and its implications for equity.

The trial court that first heard the Kentucky case included in its definition of "efficient" goals to be met by an education and requirements as to school financing, curriculum, personnel,accessibility to all children, physical facilities, instructional materials and management of the schools (Rose v. Council for Better Education 1989, 11). Judge Ray Corns (Rose v. Council for Better Education 1989, 10) wrote this definition of an "efficient" system of schools, "It is a tax supported, coordinated organization, which provides a free, adequate education to all students throughout the state, regardless of geographic location of local fiscal resources." He also indicated that an efficient system must have "substantial" uniformity.

> **The trial court broadened the definition to require an efficient school system to provide sufficient physical facilities, teachers, support personnel, and instructional materials to enhance the educational process. Also included in an adequate school system must be careful and comprehensive supervision at all levels to monitor personnel performance and minimize waste. If and where waste and mismanagement exist, including but not limited to improper nepotism, favoritism, and misallocation of school monies, they must be eliminated, through state intervention if necessary. The General Assembly has all the power necessary to guarantee that the resources provided by Kentucky taxpayers for schools are spent wisely (Rose v. Council for Better Education 1989, 10-11).**

It may be that the specificity of the court in defining the characteristics of an efficient school system will be helpful to Kentucky policymakers in reforming its system of public schools. But legislators in Kentucky face the same task that Texas has before it to agree upon equity goals within the constraints of court mandates and then define a plan to achieve said goals.

Can Texas achieve what no other state than New Mexico has been

able to achieve? In addition to the normal political factions involved in the completion for ever scarcer resources, agreement must be reached between plaintiffs in *Edgewood v. Kirby* (1989) who represent the property-poor school districts, and the coalition of large schools who fear loss of funding under a reformed finance plan. Unlike the Kentucky court, the Texas court has defined "efficient" very broadly as financial efficiency as well as a general diffusion of knowledge (Edgewood v. Kirby 1989, 12).

Conclusions and Recommendations

Why have Alaska, Pennsylvania, Virginia, Delaware, Maine, Ohio and Florida failed to achieve improved equity with well-intentioned reform packages? Did efforts in Oklahoma, Massachusetts, Minnesota, and Illinois fail for the same reasons? In the first seven states mentioned, two reasons for failed equity improvement can be identified. First, unfavorable economic conditions which result in competition among groups for scarce resources interfered with equity gains. Second, goals for equity were unachievable or in conflict with other finance and state goals. These states attempted to gain improvements in equity by redefining distribution formulas, changing programs, and searching for new funding sources. Perhaps a more successful plan would have been to redefine equity goals and then develop new plans for achieving them.

The failure of Oklahoma legislators to reform its finance system lies in the fact that equity goals developed by legislators were opposed by most education groups. Analyst Hornbostel concluded, "The effect of splintered ranks is that education becomes the victim of legislative maneuvering," (1985, 406). The only possible solution to achieving successful school finance reform, and thereby improved equity, is to form a coalition of groups willing to settle their differences before approaching the legislature. "A united front would go a long way toward achieving equity," (Hornbostel 1985, 406).

Minnesota reforms failed when special interest groups convinced legislators to alter equity goals before they could be completely phased in (Krupey and Hopeman 1983). School finance reform in Massachusetts failed to improve equity because of conflicting policy goals and political pressures at the state level and the conflict between state and local control (Morgan 1985). Illinois policymakers, like many others, attempted to settle goal disputes among various coalitions by enacting changes in the amounts of resources available and in the methods for distributing those resources (Hickrod, Chaudhari, and Hubbard 1983). Again, the problems in gaining improvements in equity seem to be centered around the definition of and consensus about equity goals.

Perhaps then, lack of widely agreed upon equity goals, or poorly defined equity goals, is the reason that school finance reform efforts have for the most part been unsuccessful. New Mexico has been able to achieve its equity goals to a greater extent than any other state. Special interest groups have not been allowed to sway the commitment of state policymakers to state education goals. Even when economic conditions increase competition for resources, state funding for education has not been reduced (King 1983).

Historically, this has not been the case so far in Texas. In 1984 with the passage of House Bill 72, the stage was set for successful financial reform by a group of powerful state political leaders and a few influential individuals. So strong was the statement of goals for excellence and equity and the commitment to see them attained, that even in the face of declining resources, the original mandates of the bill survived the subsequent legislative session without cuts in funding.

However, in the face of a continuing economic decline and a strong opposition to new taxes, the financial structure of House Bill 72's intended equity improvements began to crumble. Exacerbating the problem were the

many state mandated programs that remained unfunded or underfunded. Even though state funding was unavailable, districts were still required to comply with the mandates, further widening the gap between rich districts who have more local funds available, and poor districts forced to spend normal operating funds to meet state mandates.

Now that the Supreme Court of Texas has mandated changes in the financing of its public schools, the state must once again attempt reform (Edgewood v. Kirby 1989). but legislative committee hearings and meetings, select committees, and special legislative sessions to determine revenue amounts and sources for education will be ineffective in planning for an equitable public education system in Texas. Determining necessary resources for a system is impossible until goals have been set. Any basic planning model includes goal setting first, then determining necessary and available resources, planning, implementation, and finally evaluation.

The history of school finance reform presented in this work indicates that too often, the planning, budgeting, and even the evaluation are accomplished without first clearly defining goals. Too many states seem to have been satisfied with ambiguous plans to "improve equity" or to achieve "efficiency". Because these goals are ambiguous, little improvement in equity has been achieved in school systems across the United States.

The first step for Texas, and for any other state dedicated to genuine improvement in the equity of its school finance system, is to do as Hornbostel (1985) suggests and gather all interested parties in the state together to try to agree on some common goals for the education of its citizens before approaching the legislature. Only when there is agreement about the definition of equity, regardless of what that definition is, can progress be made toward achieving it.

Education policy analyst Kent McGuire does not believe this will

happen in Texas (School Fund Reform Due Court Oversight [1990]). Instead he predicts that the public school system will likely cost money to reform and will probably remain under court oversight for years to come. Winston C. Power, Jr., a member of the 1988 Select Committee on Education, articulated the situation as it was then, and as it still is now:

> **The answer to this tough and complex question does not lie within the confines of the fifteen-member Select Committee. The resolution is not just a formula or a plan. It is the test of whether 1,100 school districts can work together in a corporate sense, putting aside individual and local interests, to work in a statesmanlike manner for a just and reasonable response.**
>
> **There is no one solution which will uniformly please every one, and equally as important, that the best solution is likely to be one which is a compromise between extreme interests and positions. If we hold steadfastly to self interests too tightly and too long, we may find that we smother and eventually choke to death the very thing we seek to protect (Power 1988, 1).**

Current Texas Governor Bill Clements has said he will call a spring special session of the legislature on the issue of meeting the *Edgewood v. Kirby* (1989) mandates for an equitable school finance system in Texas. Clements has ruled out new taxes to pay for reforms, but has not rejected the idea of additional revenue. "First and foremost," says gubernatorial press secretary Rossanna Salazar, "the governor would like the emphasis placed on improving the efficiency and the effectiveness of our public school system in Texas before we start talking about what kinds of additional revenue we might need," (School Fund Reform Due Oversight [1990]). Governor Clements seems to favor a consensus on goals before beginning the process of determining funding plans.

Hopefully, policymakers in Texas will take the intent and goals of House Bill 72, the recommendations of the 1988 Select Committee on Public Education, the current court mandates regarding efficiency in school finance, and the philosophy of its governor and develop some long-term goals for education upon which all concerned citizens can agree. Research concerning the politics and economics of school finance might aid the search for the means to achieve consensus about equity goals. Perhaps Texas will be the leader in changing the focus of school finance reforms like those in the 1970s and 1980s from formulas and funding to a new decade of reforms in which the focus is goal-setting and consensus. It remains to be seen if this monumental task can be accomplished in the economic and political arenas in which school finance issues are resolved.

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